

Proposal Narrative

Coalition Vision. The shared vision of the Hawai‘i Island ¹ Coalition is of an Agricultural Cluster that builds its capacity to sustainably generate new jobs and income suited to the Island’s unique resources and communities. Hawai‘i Island’s Agricultural Cluster represents the region’s greatest asset and potential for economic growth and innovation. The island’s immense geographic size (4,028 square miles), abundant land and ocean resources, and variety of growing climates together create the necessary base for building a closed-loop economic system that provides quality jobs, natural resource protection, equitable economic development, and linkages to high-tech innovation and commercialization opportunities.

The County’s most recent CEDS, attached as an appendix, reflects Agriculture as a targeted cluster for development and lists the cluster goal to “Build a sustainable agricultural industry that can provide a living that is satisfying and financially rewarding for island farmers, cattlemen, aquaculturists, and agricultural sector workers and mitigating exports.” While the Regional Growth Coalition defines Hawai‘i County’s targeted cluster as Agriculture, it is important to note that this cluster connects across value-chain and supply-chain domains to other supporting clusters including transportation, warehousing, value-added processing and manufacturing, scientific research, diagnostic testing, educational services, business services, waste management, environmental services, wholesale, retail, marketing, and finance. It is this larger interconnected web that we define as the Agriculture Cluster.

Economic Opportunity. Hawai‘i County has a unique opportunity to Build its Agricultural System Back Better through a collection of projects that correct past systemic barriers to growth and respond to the current pandemic-related downturn by providing the physical and human capital needed to create a robust agricultural economy that is in line with our diverse communities’ values. The cluster has an exceptional opportunity to grow the agricultural economy within Hawai‘i. The state imports around 90% of its food, equating to three billion dollars leaving the state each year; diverting just 20% of that capital to local producers would double the sector’s market share and every 10% that is diverted would represent 2,300 new jobs. With the Hawai‘i-made brand the economic growth potential within the specialty export market is expansive.

At this time, only a small fraction of locally grown agricultural products are sold in mainstream retailers. All of the projects detailed below are designed to provide the necessary certifications for training, facilities, value-added processing, and distribution to allow locally produced food to be sold at all retailers, grocers, and clubs across our island state. We believe these investments, interventions, and greatly expanded markets, will help accelerate workforce development, wage growth, overall economic growth, and industry innovations, while collectively scaling meaningful growth and opportunities for all stakeholders.

Coalition Members

County of Hawai‘i’s Department of Research and Development (COH R&D) is the local economic development agency for the County and the lead coalition member. The Director of R&D is the project’s Regional Economic Competitiveness Officer. The County has chosen

¹ The terms “Island of Hawai‘i” and “County of Hawai‘i” are used interchangeably throughout this proposal. The County of Hawai‘i is the only local municipality for the entire Island of Hawai‘i. Generally, when “County”, or lead Coalition member “R&D” is cited, the term refers to the government entity.

coalition members based on organizations that are committed to integrated solutions that meet the community's economic, equity, and sustainable development goals.

The Food Basket Inc., Hawai'i Island's Food Bank, provides services in every community island-wide and serves low-income and ethnic minority populations. The Food Basket supports local producers through innovative programs that promote the purchase and consumption of locally grown foods in partnership with food retailers across the state.

The Hāmākua Institute is a team of international development professionals committed to supporting market systems development using collective action. They serve as the convener and facilitator of HIAP's action teams and committees.

The Kohala Center is an independent research, education, and 'āina (that which feeds) stewardship non-profit for healthier ecosystems. The Kohala Center's agroecosystems work has three main initiatives: 1) Rural and Cooperative Business Development Services, providing assistance to rural businesses statewide in the form of collective business models, capitalization services, and food systems development; 2) Namoku, a 7-acre demonstration farm serving as a waihona, or nursery, for native plants and people; and 3) Hawai'i Public Seed Initiative, promoting biodiversity and food security via the production of and education around locally-adapted seeds.

Ma'ona Community Garden is a non-profit organization established to increase the capacity and sustainability of rural food systems. Over the past eight years Ma'ona has been working to prototype the equitable organic waste management systems to capture and localize food and paper waste recycling for the benefit of agricultural producers and underserved communities.

Big Island Resource Conservation and Development Council assists people in the County in achieving sustainable development while caring for and appreciating their natural environment, seeking to ensure broadened economic opportunities in ways that conserve, enhance, and promote the economic, cultural, and natural environment of Hawai'i.

East Hawai'i Community Development Corporation is a nonprofit corporation organized to undertake community economic development, research, and charitable activities that seeks to revitalize local processing facilities to increase food entrepreneurs' access to certified kitchen facilities and business services.

University of Hawai'i as coalition member, represents many sectors of the University of Hawai'i system such as The University of Hawai'i College of Agriculture, Forestry & Natural Resource Management (CAFNR), Aquaculture & Coastal Resources Center's (PACRC), University of Hawai'i College of Tropical Agriculture and Human Resources (CTAHR), GoFarm Hawai'i, Hawai'i Community College, Big Island Invasive Species Committee (BIISC), and The Data Sciences Institute.

Component Projects. The Coalition projects represent strategic interventions derived from an agriculture and food system study completed in April 2021 that analyzed the opportunities for market growth within the cluster. It was conducted by the Hāmākua Institute for HIAP and in partnership with the Hawai'i Island Food Alliance (HIFA). Our proposed projects within the cluster are designed to support the development of a circular economic system, a model which is ideal and increasingly achievable for island states, and fall within three broad categories: (1) **Value Chain Development**, which will increase infrastructure and services for expanding the availability of diverse Canoe crop varieties to producers, aggregation to increase farms access to market, shared facilities for value-added production, and integrated systems within the cluster that utilize closed loop waste strategies and renewable energy to reduce the cost of production;

(2) **Market Development**, which will increase the island’s collective capacity to build its economic competitiveness and sustainability within the cluster; and (3) **Workforce Development, Research and Innovation**, which will increase agribusiness employment and technical skills, innovate through research, and combat invasive species and the impacts of climate change, culminating in the Island of Hawai‘i’s status as an Agricultural Knowledge Center of Excellence in the Pacific. The nature of this cluster’s design is to develop closed loop systems which means that most projects touch each of these three categories.

Value chain Investment Projects

1. Build Hawai‘i Island Agricultural Innovation Industrial Park (AIIP) and Food Systems Campus that is inclusive of The Food Basket’s facilities, in collaboration with the Hawai‘i County Regional Coalition, and implement out shared strategic objectives to: **a)** increase value-added processing capacity on Hawai‘i Island, supporting a network of certified kitchens and food hubs, and establishing a centralized facility for aggregated production and shared high-volume processing; **b)** explore and support new models of aggregation, processing, and distribution, particularly from small farms, regularly utilizing online information and establishing partnerships around food standards; **c)** increase support and efficiency of agricultural products transportation and distribution, identifying strategic opportunities for shared for-profit and nonprofit use of equipment and facilities; **d)** increase incentives and mechanisms for cooperation to lower costs and increase opportunities for small farms; and **e)** increase collaboration among all stakeholders in the system using (HIAP) and (HIFA) platforms.
2. Improve existing “Miko Meats” industrial space to be utilized for shared use processing facilities and business services. The project will serve the immediate demand for these facilities, before the AIIP build-out is complete.
3. Implement expanded breadfruit agroforestry production and processing on Hawai‘i Island by upgrading an East Hawai‘i Island processing facility for dried and milled flour products centered around breadfruit and other high-demand agroforestry crops.
4. Expand the availability of Canoe crop varieties through nursery expansion and educational programming to increase traditional food production and preservation within public and private organizations, and with families across the island.
5. Integrate closed loop waste strategies within the cluster and catalyze job growth throughout the waste management value chain by coordinating with existing business and investing in flexible, climate-resilient green infrastructure.

Market System Development

6. Implement Market Development Program teams to support the diverse set of agriculture markets within the cluster. The teams will identify high potential growth opportunities, where there is demand for shared equipment, processes, and services that stimulate production and job growth, and build sustainable demand for these support functions to continue stimulating cluster growth beyond the period of the grant. The teams will monitor the economic impacts of their interventions to grow the cluster using a Diffusion of Innovation model for identifying how introduced changes create a multiplier effect throughout the market system.
7. Develop a stronger agricultural economy by providing businesses with equitable and sufficient access to technical assistance in business development, marketing, efficiency planning, and capitalization through an assessment of and an informed investment in existing services island-wide.

Workforce Development, Research, and Innovation

8. Implement critical investment and system improvement strategies within the UH system that address needed infrastructure, equipment, curriculum, research, technology, data, and staff needed to address the challenges and opportunities with the Agriculture Cluster.

Preliminary Metrics of Success

A stable local economy is a requirement for strategic growth and innovation. This proposal recommends projects that will serve island residents and small business owners who have persevered in the face of repeated economic and geopolitical shocks resulting from natural disasters including hurricanes, tsunamis, earthquakes, flooding, and volcanic eruptions; and pandemics such as SARS and now COVID-19. This series of events has stretched the limits of the region's endurance, making clear that the need to restructure the local economy quickly is critical to building resilience for the future. The most important metrics of success will indicate improvements in labor force participation, income and wages, and poverty rates of the estimated 200,629 residents of Hawai'i County (U.S. Census, 2020). While Hawai'i's unemployment rate has recovered significantly from the effects of the pandemic, Hawai'i County's employment rate lags behind the State and the United States. Nonfarm unemployment rates for August 21, 2021, for the County, the State, and the United States were 6.9%, 6.6%, and 5.2%, respectively.

We will evaluate the proposed projects success in the following ways: **Value chain**

infrastructure: new and improved value chain infrastructure (# and sq ft); amount (#) of waste diverted and Amount (KWH) of energy saved from renewable energy integrated within the facilities; average income of farmers and food producers, by demographics who utilize cluster infrastructure and technical assistance services; # of producers who incorporate new canoe crops within their production; **Market Development Services:** clients and industry associations engaged; # of new financial structures deployed; # and \$ of new capital investments placed by 4 sector investors/grantors (government, philanthropy, and the private sector); demographics of investment and grant recipients; analysis of capital placed. **Workforce Development, Research, and Innovation:** amount (#) of agriculture and manufacturing technologies that are implemented into systems that increase efficiency; # of university students hired into the local agricultural cluster; and # of trainings and # trained, by demographic groups. **Whole system metrics:** overall cluster job creation; wage growth; reduced unemployment; and anticipated regional GDP growth. **Resiliency metrics:** # of green build/energy projects; # and strength of disaster response plans and public-private sector networks; # of businesses implementing resilience strategies and type of strategy; etc.

Accessibility of Matching Funds for Phase 2

Coalition members have strong ties to the foundation community and R&D's Food System Specialist participates in the Food and Farmers Working Group, a statewide alliance of foundations, investors, and local government departments dedicated to working together to elevate Hawai'i's community food system through strategic investment. The Coalition has received letters of support from Stupski Foundation, Hawai'i Community Foundation, and The Harry and Jeanette Weinberg Foundation expressing their support and interest in investing in the proposed projects. In addition, The Food Basket has a potential match from CDBG funds for the Agriculture Innovation Industrial Park and Community Food Center and can bring additional investment into the local economy through their 6,500 plus individual donors, private, County, State and Federal grants, facilitating and building on their trusted relationships with stakeholders

in our region. The Big Island Resource Conservation and Development project with Hawai‘i ‘Ulu Cooperative has two million dollars committed to their facilities improvements. The Hāmākua Institute will utilize private sector investment for their market system development project. The East Hawai‘i Community Development Corporation intends to secure a loan and private sector investment to match funds for Miko Meats Facility improvements. Lastly, The Kohala Center and Ma‘ona Community Garden will draw upon their robust foundation network to provide matching funds for their project activities.

Barriers to Implementation. Hawai‘i Island’s agricultural cluster has its roots in a self-sustaining Polynesian agricultural systems that were disrupted with over a century of plantation sugar production until the sugar industry on the island closed 27 years ago. Since then, there has been a steady increase in the number of small farms on the island and a significant diversity of crops produced from them. The island’s agricultural production and private investment has dramatically changed, yet our island’s infrastructure, services and government support have not kept up, holding back the growth of our agricultural industries.

The agriculture and food system study completed earlier this year, identified six main market system constraints: 1) the lack of available processing and packaging infrastructure, equipment and services; 2) limited transportation and aggregation services and storage infrastructure to enable aggregation of small farm production into larger quantities to access larger markets; 3) the lack of an integrated public-private system for efficiently managing food waste and extracting its optimal value in enhancing food production; 4) a limited pool of affordable expertise and experienced workers to support agricultural growth; 5) a dearth of market data and shared market analysis to help guide local producers and other value chain actors to more effectively compete local products with cheaper imports; and 6) fractured and inconsistent efforts at building a shared brand image for local agricultural products in Hawai‘i and in key target markets on the continental U.S. and overseas. Our strategic system investments within the clusters value chain paired with comprehensive market development services and investments within the University’s departments will actively work to mitigate these barriers to success within the cluster.

General Implementation Timeline. The Coalition will utilize EDA technical assistance phase one funds to develop detailed implementation timelines for each project that will then be submitted for consideration within our phase two proposals. We know that during year one, infrastructure projects, after the Phase one planning, design, and partner engagement is completed, will start construction or construction preparations of new and improved infrastructure development projects. Construction project timelines will vary depending on permitting processes and material and labor availability; all projects will be completed before September 30, 2027. The Hāmākua Institute will structure and develop HIAP as a mechanism for facilitating the public-private collaboration throughout the cluster and design the AIIP management structure. The Kohala Center will focus on technical assistance and the economic viability and sustainability of project investments, and will be engaged in activities throughout the project, strengthening relationships, initiatives, and networks designed to be sustained beyond the project term. The University will begin implementing investments and strategies identified in phase one.